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Claims

1. Data medium (1) with a printed image produced by the intaglio printing process, having at least one first ink area (12a) with a first ink layer thickness (D_a) and at least one second ink area (12b) with a second ink thickness (D_b), adjacent to the first ink area, whereby the ink layer thicknesses (D_a, D_b) are different,
characterised in that
the first and second ink areas (12a, 12b) are directly adjacent to each other and are separated from each other by a sharp border line not visible to the naked eye, and that the ink layer thickness of both ink areas (12a, 12b) passes through a minimum in the region of the border line.

2. Data medium according to Claim 1,
characterised in that
the minimum is an ink layer thickness of almost zero.

3. Data medium according to Claim 1 or 2,
characterised in that
the first ink area (12a) and/or the second ink area (12b) represent a pattern, graphical symbol or text symbol.

4. Printing plate (1) for the printing of adjacent ink areas (12a, 12b), including a printing plate surface (2) and engraved in the printing plate surface (2), at least one first engraving area (3a) with a first engraving depth (t_a) and at least one second engraving area (3b) with a second engraving depth (t_b) adjacent to the first engraving area (3a), such that the engraving depths (t_a, t_b) are different,
characterised in that
between the first and the second engraved areas (3a, 3b), is arranged a separating edge (5) the upper edge (6) of which runs towards a point at the level of the printing plate surface (2).

5. Printing plate according to Claim 4,
characterised in that

the separating edge (5) has flank angles (α) in the region between 15° and 60°, preferably between 30° and 50°, relative to the perpendicular to the printing plate surface (2).

6. Printing plate according to Claim 4 or 5,
characterised in that
the first and second engraving depths (t_a, t_b) lie in the region between 5 and 250 µm.

7. Printing plate according to Claim 6,
characterised in that
the first and second engraving depths (t_a, t_b) lie in the region between 5 and 150 µm.

8. Printing plate according to at least one of the claims 4 to 7,
characterised in that
the first engraved area (3a) and/or the second engraved area (3b) form a pattern, a graphical symbol or a text symbol.

9. Printing plate according to at least one of the claims 4 to 8,
characterised in that
the first and/or the second engraved area (3a, 3b) have a floor area (7) having a floor roughness pattern.

10. Intaglio printing process for the printing of adjacent ink areas (12a, 12b) with different ink layer thicknesses (D_a, D_b), whereby a printing plate according to one of the claims 4 to 9 is used.

11. Process for the manufacture of a printing plate (1) for the printing of adjacent ink areas (12a, 12b) with different ink layer thicknesses (D_a, D_b), including the following steps:

- Provision of a printing plate (1) with a printing plate surface (2) and

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- Engraving of a first engraving area (3a) with a first engraving depth (t_a) and a second engraving area (3b) with a second engraving depth (t_b) in the printing plate surface (2), such that between the first engraving area (3a) and the second engraving area (3b), a separating edge (5) remains, having an upper edge (6) which runs towards a point at the height of the printing plate surface (2).

12. Process according to Claim 11,
characterised in that
the separating ridges (5) are formed with flank angles (α) in the region of 15° to 60°, preferably 30° to 50° relative to the perpendicular to the printing plate surface.

13. Process according to Claim 11 or 12,
characterised in that
an engraving tool with a suitable flank angle (α) is used for engraving.

14. Process according to Claim 13,
characterised in that
a rotating graver coming to a point is used for engraving.

15. Process according to at least one of the claims 11 to 14,
characterised in that
the engraving depths (t_a, t_b) are created in the region from 5 µm to 250 µm.

16. Process according to Claim 15,
characterised in that
the engraving depths (t_a, t_b) lie in the region from 5 µm to 150 µm.

17. Process according to at least one of the claims 11 to 16,
characterised in that

in the first engraving area (3a) and/or in the second engraving area (3b), a floor area (7) with a floor roughness pattern is created.

18. Process according to at least one of the claims 11 to 17,
characterised in that
several adjacent first engraving areas (3a) and one or more adjacent second engraving areas (3b) are engraved in the printing plate surface (2).

19. Process according to at least one of the claims 11 to 18,
characterised in that
the first or the several first engraving areas (3a) and/or the second or the several second engraving areas (3b) are arranged in the form of a pattern, graphical symbol or text symbol.